

**CLASS SPECIFICATION**

**SAN DIEGO CITY CIVIL SERVICE COMMISSION**

**ASSISTANT ENGINEER - CIVIL**

**DEFINITION:**

Under general supervision, to perform journey-level professional engineering work; to serve as a design engineer with responsibility for all phases of a design project of average difficulty; to perform complex construction inspection; to check complex building and subdivision plans; to serve as project manager for an engineering project of average complexity; and to perform related work.

**\* EXAMPLES OF DUTIES:**

- Prepares construction plans, profiles, property maps, and cross-sections for the design of improvements and structures;
- Makes quantity and cost estimates;
- Performs horizontal and vertical alignments;
- Prepares curve, flow, and capacity computations;
- Establishes tentative grades;
- Prepares design sketches for drafting personnel or may do the drafting for such design projects;
- Prepares cost and strength evaluations;
- Prepares specifications and contracts documents after conference with appropriate supervisors;
- Inspects and coordinates the construction of major construction projects such as buildings, bridges, reservoirs, sewers, water lines, and major water and sewage treatment plants;
- Inspects and tests construction materials;
- Serves as a resident engineer on City contract construction and inspects subdivision or permit construction work;
- Performs operational and facility improvement studies;
- Reviews moderately complex plans for conformance to code;
- Calculates structural adequacy;
- Consults with architects and contractors regarding required plan modifications;
- Checks and approves the public improvement proposals and designs of private engineers for conformance with State and local requirements and standards;
- Oversees the maintenance and retention of engineering maps and records in various types of systems including automated and manual systems;
- May supervisor paraprofessional engineering or drafting staff in a variety of engineering and drafting support functions;
- Coordinates and performs engineering-related Geographical Information Systems (GIS) functions and ensures the integrity and maintenance of the information within the GIS databases;
- Coordinates and performs Computer Aided Drafting and Design (CADD) functions;
- Assists in developing Capital Improvement Project budgets;
- Performs complex computer data modeling for planning, operational support and other engineering related purposes.

**As a design or construction project manager:**

- Coordinates the planning, design and construction of engineering projects of average complexity;
- Assists in the consultant selection process and in negotiating scopes of work;
- Approves contractor progress payments and minor change orders.

**MINIMUM QUALIFICATIONS:**

Please note: the minimum qualifications stated below are a guide for determining the education, training, experience, special skills, and/or license which may be required for employment in the class. These are re-evaluated each time the position is opened for recruitment. Please refer to the most recent Job Announcement for updated minimum qualifications.

College graduation with a Bachelor's degree in Civil Engineering or a related engineering field, **OR** registration as a professional Civil Engineer with a State Licensing Board, **OR** certification as an Engineer-in-Training; **AND** two years of professional civil engineering experience.

\* **EXAMPLES OF DUTIES** performed by employees in this class. The list may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.